Castlemaine Naturalist

December 2022

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.

Caladenia tentaculata,
Fryers Ridge. *Photo: Euan Moore*

November Excursion: "Wildflowers in Fryers Ranges"

On our November 12 excursion, led by Richard Piesse, 15 members and 5 visitors found stunning wildflowers at 3 sites in the Fryers Ranges woodlands. Despite earlier forecasts of afternoon rain, we enjoyed fine weather, although the mosquito numbers were uncomfortably high. From Taradale, we took the Taradale-Fryerstown Rd, stopping first at the beginning of the Fryers Ridge Nature Conservation Reserve where we parked on Salt Water Track. Richard led us about 150m up the track to see the rare Fryerstown Grevillea *G. obtecta.* This plant, that occurs only in the Fryers Ridge – Porcupine Ridge area, was the topic of Georgia Custance's talk to our October meeting and excursion, cancelled due to the floods but now rescheduled to February. Several healthy examples of this low growing plant, some in flower, were seen and photographed. As the group spread out, we found many wildflowers, some new to our visitors from Melbourne.

Prasophyllum aff. odoratum
Scented Leek Orchid
Photo: Noel Young

We then continued up the Taradale-Fryerstown Rd (the Old Coach Rd) to the junction with Fryers Ridge Rd: "The Cutting". Here the uncommon Heath Milkwort *Comesperma ericinum* was conspicuous. Above the cutting we found a number of blue sun-orchids, but the Eastern Bronze Caladenia *C. transitoria* seen when planning the walk a week before had finished flowering.

We then headed south along the Fryers Ridge Rd, passing extensive growths of Dwarf Bush-pea *Pultenaea humulis,* another outstanding example of the precious wildflower species in this important area. The final stop was at the site of the former fire tower on Old Tower Track. The many Spider Orchids seen a week before were still in full flower, resulting in multiple photos and debates over species amongst the experts. Another exciting find was a splendid Scented Leek Orchid *Prasophyllum aff. odoratum.*

Thanks to Richard Piesse for leading this very rewarding excursion; to Geraldine Harris and Euan Moore for corrections and additions to the report and plant list; and to the photographers, Noel Young (NY) and Jill Williams (JW).

Peter Turner

Pultenaea humilis (NY)

Comesperma ericinum (NY)

Grevillea obtecta (NY)

Gompholobium huegelii (NY)

Castiarina octomaculata on Heath Tea-tree (JW)

Coltricia sp. (JW)

November excursion – List of Plants in Flower

Arthropodium strictum Chocolate Lily	*Brachyloma daphnoides* Daphne Heath
Lomandra filiformis Wattle Mat-rush	*Leucopogon ericoides* Pink Beard-heath
Lomandra longifolia Spiny-headed Mat-rush	*Leucopogon virgatus* Common Beard-heath
Thysanotus tuberosus Common Fringe-lily [1]	*Acacia mitchellii* Mitchell's Wattle (seed pods)
Burchardia umbellata Milkmaids	*Acacia oxycedrus* Spike Wattle
Dianella revoluta Black-anther Flax-lily	*Acacia paradoxa* Hedge Wattle
Luzula meridionalis Common Wood-rush	*Acacia provincialis* Inland Wirilda
Caladenia cucullata Hooded Caladenia	*Daviesia leptophylla* Narrow-leaf Bitter-pea
Caladenia moschata Musky Caladenia	*Dillwynia ramosissima* Bushy Parrot-pea
Caladenia parva Green-comb Spider-orchid [2]	*Dillwynia sericea* Showy Parrot-pea
Caladenia tentaculata Mantis Orchid [2]	*Gompholobium huegelii* Common Wedge-pea
Calochilus robertsonii Purple Beard-orchid	*Indigofera australis* Austral Indigo
Glossodia major Wax-lip Orchid	*Platyobium montanum ssp prostrastum* Prostrate Flat-pea
Prasophyllum aff. odoratum Scented Leek-orchid	*Pultenaea daphnoides* Long-leaf Bush-pea
Thelymitra aristata Great Sun-orchid [3]	*Pultenaea humilis* Dwarf Bush-pea
Thelymitra pauciflora Slender Sun-orchid	*Pultenaea pedunculata* Matted Bush-pea
Thelymitra carnea or T. rubra (not fully open)	*Coronidium scorpioides* Button Everlasting
Thelymitra ixioides Spotted Sun-orchid	*Geranium gardneri* Austral Crane's-bill
Microtis unifolia Onion-orchid	*Goodenia blackiana* Black's Goodenia
Craspedia variabilis Billy Buttons	*Gonocarpus tetragynus* Common Raspwort

Microseris walteri Murnong (Yam Daisy)	*Prostanthera denticulata* Rough Mint-bush
Ozythamnus obcordatus Grey Everlasting	*Eucalyptus leucoxylon* ssp *pruinosa* Yellow Gum
Podolepis jaceoides Showy Podolepis	*Eucalyptus polyanthemus* Red Box
Senecio phelleus Slender Groundsel	*Leptospermum myrsinoides* Heath Tea-tree
Xerochrysum viscosum Sticky Everlasting	*Rhytidosporum procumbens* White Marianth
Brunonia australis Blue Pincushions	*Comesperma ericinum* Heath Milkwort
Wahlenbergia stricta Tall Blue Bell	*Grevillea alpina* Downy Grevillea
Stackhousia monogyna Creamy Candles	*Grevillea obtecta* Fryerstown Grevillea
Hibbertia fasciculata Bundled Guinea-flower	*Philotheca verrucosa* Fairy Wax-flower
Drosera auriculata Tall Sundew	*Stylidium graminifolium* Grass Trigger-plant
Drosera macrantha Climbing Sundew	*Stylidium armeria* Common Trigger-plant
Tetratheca ciliata Pink Bells	*Pimelea humilis* Common Rice-flower

1. Probably *Thysanotus tuberosus sub.sp. tuberosus*.
2. Identification of the Spider-orchids not definite. *C. phaeoclavia, C. parva, C. tentaculata* suggested by RP, GH and EM. Probably *C. tentaculata* according to EM.
3. Identification uncertain. This was a single very tall orchid with blue buds. No photos available; images of fully open flowers needed for definite ID.

Fauna

Limnodynastes tasmaniensis, Spotted Marsh Frog (juv.)	*Cormocephalus aurantiipes,* Orange-footed Centipede
Litoria ewingii, Southern Brown Tree Frog (juv.)	Brown and White-throated Treecreepers
Crinia signifera, Common Eastern Froglet	Black-faced Cuckoo-shrike
Belenois java, Caper White Butterfly	

Roadside Clean-up, November 21st

Our final Roadside Clean-up for 2022 was held on Monday 21 November. Despite threatening weather, we had a reasonable turn-up to brave the very chilly and windy conditions with much water under-foot.

There was much less rubbish than usual, possibly the rest was washed away by all the runoff that we have had - we collected about 300 litres of rubbish (11 half-filled 55 litre bin bags plus a folding chair and a 3 meter length of threaded stainless steel rod).

There were good patches of Sticky Everlastings and Onion Orchids and a few Magenta Stork's-bill.

Thanks to Jan, Geraldine, Peter, Sue, Jenny & Euan.

Geoff Harris

November Meeting Report "*Mycobacterium ulcerans* (Buruli ulcer) in our native mammals in the wild" Dr Christina McCowan (Uni. Melbourne)

Dr Christina McCowan, a Specialist Veterinary Pathologist who currently works for Agriculture Victoria, gave the group an interesting and comprehensive talk on an emerging disease in Victoria known as Buruli (or Bairnsdale) ulcer in possums in Victoria. This disease was first identified in humans in Victoria in the 1940s and the causal agent was identified as *Mycobacterium ulcerans*.

This bacterium causes focal, chronic, ulcerative lesions with a red raised border and central sunken, necrotic area. In West Africa, where it is much more common, it often goes untreated due to economic factors and causes disfiguring and disabling lesions. That geographical area gives it the name Buruli ulcer.

The typical Buruli ulcer lesion in man.

The organism, as a *Mycobacterium*, is related to the bacteria that cause Tuberculosis (*M. tuberculosis)* and Leprosy (*M. leprae*). However unlike those diseases, Buruli ulcer is not known to be transmitted human to human. The mode of transmission remained largely obscure until recently. Christina worked in the group who were studying the disease in possums to elucidate how this disease is spread.

The disease remained localised to the Bairnsdale region until the 1990s when a cluster of 25 cases associated with the Phillip Island golf course. In early 2000 a further locus of the disease was identified in the Point Lonsdale area of the Bellarine peninsula, but cases were not seen between these sites.

A PCR test for the organism was then developed and this enabled mosquitoes to be identified as spreading the disease. However it is still unknown whether the mosquitoes become infected or whether they merely carry the organisms on their body or legs.

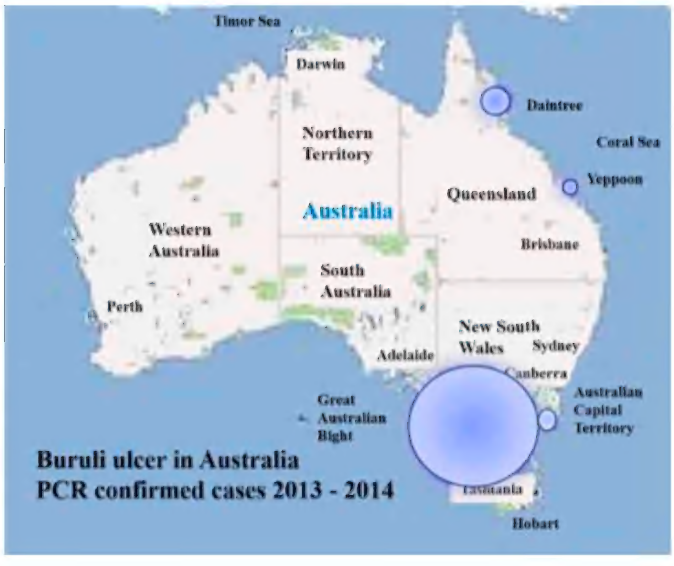
However cases of the disease began to be identified in possums in the same Point Lonsdale area as where the human cases were occurring and possum faeces found in this area were strongly positive for the organism on PCR testing. A few individual cases have also been seen in horses, dogs and cats. However most non-human cases in Victoria have been in possums.

Buruli ulcer on the nose of a Ring-tailed Possum.

Possums are believed to be an amplification reservoir but don't appear to be capable of infecting people. No other wildlife vectors have been identified in Victoria. However the spread of the disease is saltatory rather than linear and how and why the disease jumps to new locations remains unknown. A further pocket of cases has

been seen in Queensland in the Daintree where bandicoots, rather than possums, appear to be the reservoir.

The disease has a long incubation period (4-5 months or more between exposure and development of the ulcers). However it appears the ulcers can develop after a single short exposure of as little as one hour in the area. Most individual cases outside the focal areas (e.g. Yeppoon, Southern NSW) have a history of travel to one of the known areas.



In 2021 further cases were identified in humans in Geelong, Essendon, Moonee Ponds and Brunswick and more recently, spreading to the Mornington peninsula. Interestingly, the number of cases of Buruli ulcer are decreasing in West Africa and also in the Daintree, but are increasing in Victoria. The cause of this disparity is unknown.

ADDENDUM: Anyone who would like more detail on the way the disease and its spread was identified might like to listen to the podcasts Breaking Buruli Part1 (27 Feb, 2022) and Part 2 (6 March 2022) which are still available on the ABC Science Friction programme (can be accessed on the ABC Listen app). There was also an article on Buruli ulcer in the Melbourne Age Nov 9th 2022.

Judith Nimmo

New Chilean Needle Grass brochure

Margaret Panter has produced another excellent brochure on Needle Grass, this time the Chilean Needle Grass, one of several invasive Needle Grasses in our area.

Now is the time to be on the lookout for Needle Grass before it seeds. The brochure is packed full of well-illustrated information to help us recognise the Needle Grass and to learn how to get rid of it.

The brochure is available on the "Important Weeds" page of our website together with information on other important weeds of our region.

Chilean Needle Grass seeding. Note the long awns.

Great Southern Bioblitz 2022 – what did we find??

Our club took part in the Great Southern Bioblitz for the second time this year. For four days at the end of October, our members and others from the wider community made observations of flora and fauna across Mt Alexander Shire and the eastern half of Hepburn Shire. All this was part of a global effort that included groups from many Southern Hemisphere countries and provides a snapshot of the biodiversity that is found in the diverse habitats.

This year we had 35 observers who between them recorded a total 2122 observations representing at least 601 species. There were 176 people from the wider iNaturalist community who identified or confirmed the identification of our observations. The number of species recorded is almost certainly an underestimate as we have nearly 800 observations where the final identification has not yet been confirmed.

So what did we find?

333 (55.59%) Plants (includes mosses and ferns)

110 (18.36%) Insects

63 (10.52%) Birds

54 (9.02%) Fungi including lichen (many still to be identified so not included.)

12 (2%) Spiders and scorpions

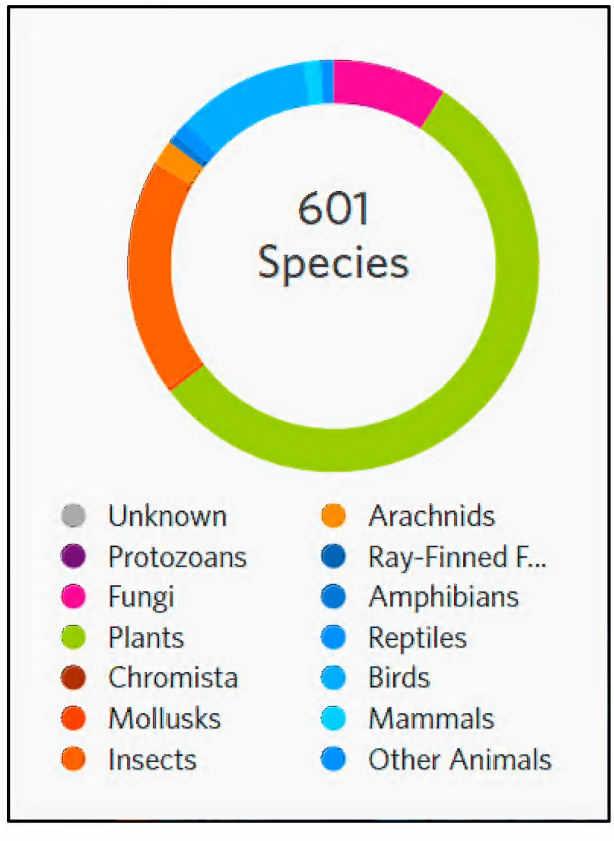
8 (1.34%) Mammals

7 (1.17%) Reptiles

4 (0.67%) Frogs

2 (0.33) Molluscs

6 (1%) Other Animals



There were several reasons for the relatively large number of unidentified species. Many were fungi where identification is uncertain due to the number of species yet to be formally described or where the photos did not provide a clear enough view of diagnostic characters. Insects and other invertebrates also fail to be fully identified for similar reasons. In some cases the reason observations had not been identified to species level is that there was disagreement between the observer and the identifiers. This can occur where key characteristics are not clearly shown in the photo or when the species itself is not well defined or yet to be described. In these cases the observation is recorded at the lowest level of agreement (genus, family, etc) and will be refined in the future.

Our most frequently observed species was the Chocolate Lily, *Arthropodium strictum*, hardly surprising given the magnificent displays it has made this spring. Other frequently observed species included Sticky Everlasting, *Xerochrysum viscosum*, and Milkmaids, *Burchardia umbellata*. Our most frequently recorded birds were

Laughing Kookaburra (11 obs), Crimson Rosella (10 obs), Sulphur-crested Cockatoo (8 obs), White-winged Chough (8 obs) and Superb Fairywren (7 obs).

Our most frequently observed species, *Arthropodium strictum*, Chocolate Lily. Several of the uncommon white-flowered form were seen this year. Youngmans Track. *Photo: Euan Moore*

When it comes to fungi, we had 203 observations of which 39 were identified and confirmed to species level. Of the remaining 164 observations, about 10% were identified to species level but not confirmed with the remainder only identified to a higher level such as genus, family or class. Our group definitely needs some more members to take a detailed interest in fungi. Perhaps working out identifications on iNaturalist is the way to go!

Our observations of fungi, including lichens, were often not identified. This is probably a *Cladonia sp* growing amongst moss. *Photo: Habitatearth.*

One interesting group that was observed was the protozoans. While most members of this group are microscopic there are some that can be easily seen with the naked eye. These are the slime moulds. We had three slime moulds recorded in our area. Often mistakenly lumped in with fungi these organisms spend part of their life as individual protozoan cells before aggregating to form sometimes intricate fruiting bodies. Watch out for them next time you are wandering the bush in damp conditions.

The fruiting body of a slime mould (*Phyllum Mycetozoa*) at Fryers Ridge. *Photo: Lisa Hewitt*

Another aspect of the Great Southern Bioblitz is the competition between regions and countries participating. Starting as the City Nature Challenge between Los Angeles and San Francisco it expanded to become global by around 2020. Around this time organisers and participants realised that the City Nature Challenge, held in the northern hemisphere spring was not well timed for participants in the southern hemisphere and so the Great Southern Bioblitz was initiated in 2020. Our group has done particularly well with observations coming

in at number 8 out of 86 contestants for Oceania (Australia, NZ and South-west Pacific), and number 21 out of 242 for the entire southern hemisphere. For number of species we came in at number 14 for Oceania so it's time to start polishing your identification skills ready for next year!

A summary of the results for the whole GSB2022 with fascinating observation highlights can be viewed here:
https://www.greatsouthernbioblitz.org/gsb2022highlights

Euan Moore

Some more of our group's observations, showing the wide range of species recorded:

This Leaf Beetle (not a ladybird) caused some discussion. It is probably genus *Peltschema* but may be an undescribed species.
Photo: Geraldine Harris

Spotted Ground Swift Spider (*Nyssus coloripes*) at Wewak track.
Photo: Jenny Rolland

Thick-tailed Barking Gecko (*Underwoodisaurus milii*). Muckleford. *Photo: Brendan Sydes*

Satin-green Forester (*Pollanisus viridipulverulenta)* was recorded 5 times during the Bioblitz.
Photo: Noel Young

December Observations "Wildlife" 1944

George Broadway

Specimens sent to the Editor of "Wildlife" magazine, Crosbie Morrison, for identification, December 1944.

In the editorial of that month, the hope was expressed that that would be the last wartime edition. Happily, as we know, that hope came to fruition.

However, it seems that the readers had not been very active that month and so there were not many specimens sent in. Perhaps readers were preparing for the last wartime Christmas. (They hoped)

Here then are some of the specimens.

Insects

Broadmeadows: Your insect taken from a log of firewood was the Tree Cricket, *Paragryllacrus.* Commonly sent in, I suppose that in those days most people were using firewood to heat their homes as well as cooking on wood stoves.

Tooborac: one of the Hawk Moths, not possible to identify from description, but sounds closest to the Vine hawk Moth.

Botanical

Sutherland Creek via Bannockburn: Decorative form of the common Olive, *Olea europea.* Native of Europe

Preston: Leper Acacia, *Acacia leprosa.* So named from its leprous odour according to Ewart.

Warrandyte: The dainty little orchid was the Gnat Orchid, *Cyrtostylis reniformis.*

Brisbane: The yellow leaves of the Poinsettia are the transition stage between the green leaves nearer to the base of the stem. Next come the yellow leaves, and finally the bright red leaves surrounding the flower.

Birds

Hunters Hill (NSW): 1. The Peewee or Magpie Lark or Mudlark is only half the size of a magpie and has a piercing call quite unlike that of a magpie.

2. Some parrots seem naturally more apt than others to learn to talk, and they seem to learn better when alone than with company. Don't adopt the barbarous habit of splitting the tongue – it does not help and is cruel.

Culgoa: The lovely bird was the Crimson Chat which sometimes turns up in Northern Victoria in some years and is not seen again for some years. (GB: We had a visit from some here in October 2019).

Horsham: The little bird with the yellow crest picking insects from under the bark would be the Eastern Shrike Tit.

Sunshine: Your little bird with the nest in a prickle bush was the White-fronted Chat, one of the birds which do the "broken wing trick" when they feel that danger is near. (GB: I used to see them in the "prickle bushes". i.e. Gorse, near the Gowar School).

Millswood (SA): Your Thornbill corresponds in every respect with the Buff-tailed Thornbill.

Welbungin (W.A.): The male emu is slightly larger, although there is little difference in size. Contrary to the general rule it is the male who does most of the incubating and looking after the chicks.

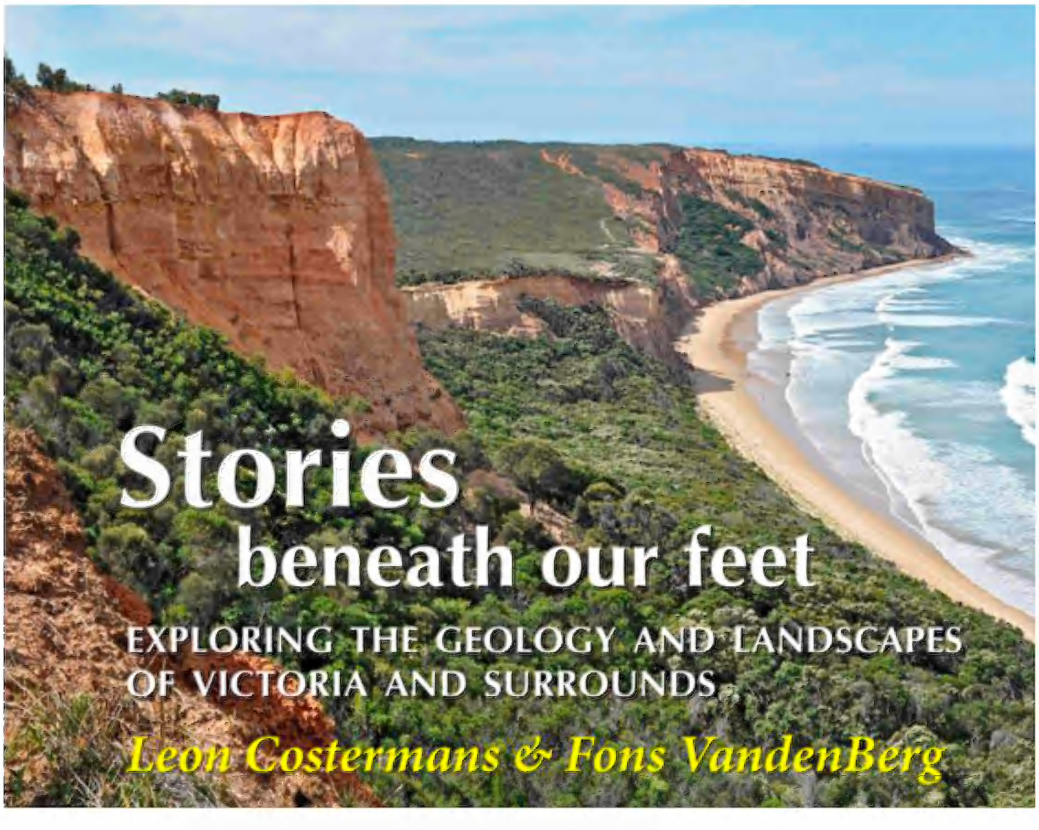
Spiders

Elsternwick: Humpback Spider, *Uloborus barbipes?* A harmless species, commonly found in small colonies.

General

Williamstown: Ordinary mice frequently make extraordinary noises, some even going so far as to singing almost as sweetly as a canary. It is caused by a freak formation in the respiratory system. Some of these formations are inherited so that you may have whole families of "singing mice".

Carnegie: You are correct – the earthworms were mating. Later each will produce an egg cocoon since earthworms are hermaphrodite, i.e. both male and female.



***At last!* A book about geology and landscapes that anyone can understand . . .**

Many years in the making, this impressive book reveals the geological origins of the diverse landscapes in south-eastern Australia, aided by high quality photos, digital images, geological maps and diagrams. It is written to appeal to anyone with an interest in the natural environment and does not assume a geological background.

Purchasing details at https://mucklefordbooks.com. You can collect your book(s) at our monthly meeting on December 9th to avoid postage costs. Beth Mellick will be there from 7.15pm. You can either pay online in advance or pay Beth there.

Observations

Peter Turner

A large Yabby, seen on a rock in our creek.

Long-necked Turtle, found during the Roadside Clean-up.

Rosemary Turner – CBG Fauna & Flora reserve.

Podolepis sp.

Thelymitra pauciflora

Kerrie Jennings - Baringhup

White-breasted Woodswallow

An injured juvenile Whistling Kite, now doing well in rehab.

European Carp (post flood).
Inset shows its enormous number of eggs.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

COMING EVENTS

MONTHLY MEETING: Friday 9th December, 7.30pm

Uniting Church Fellowship Room, Lyttleton St, Castlemaine

Members night!

A chance for you to share your interesting nature sightings and stories from the year. You can show photos, a video or a short power-point presentation, recite a poem or sing a song.

Please email your photos to Euan Moore at calamanthus5@bigpond.com by noon on the day of the meeting. If you have any queries about how to show your presentation, please contact Euan.

Please bring a small contribution to supper which will follow the meeting.

END OF YEAR PICNIC: Tuesday 13th Dec, 5pm onwards

Castlemaine Botanical Gardens

- Meet on the lawn at the northern end of the Botanical Gardens
- BYO-everything (including chairs and insect repellent)
- Park in Downes Rd near the corner with Froomes Rd and enter by the NE gate, or park in the northern Downes Rd carpark
- A chance for a wander in the Nature Reserve to see the wildflowers in between relaxing and enjoying good company in a beautiful setting.

Program for 2023

- **January – no meeting or excursion,** but this is the time to search for Eltham Copper Butterflies and other interesting flora and fauna!
- **Friday February 10th and Saturday February 11th** – Georgie Custance, "The *Grevillea obtecta* project", rescheduled from last October. Details will be emailed to members and posted on our website.

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com
* Deadline for the February edition: **27th January**

Club website (Webmaster: Ron Wescott) – www.castlemainefieldnaturalists.org.au

Subscriptions for 2022 (Membership forms on CFNC website)

Ordinary membership: Single $35, Family $50
Pensioner or student: Single $25, Family $30
Subscription includes the monthly newsletter, Castlemaine Naturalist.

2022 Committee

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